

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATIONS

PATENT

Docket No.: 36598/RJP/B600

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled LARGE GAIN RANGE, HIGH LINEARITY, LOW NOISE MOS VGA, the specification of which is attached hereto unless the following is checked:

X was filed on April 12, 2000 as United States Application Number or PCT International Application Number 09/547,968 and was amended on ___ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of the foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Application Number Country

Filing Date (day/month/year) Priority Claimed

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

Application Number Filing Date
60/129,133 Filing Date
April 13, 1999

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

| Application Number | Filing Date | Patented/Pending/Abandoned |
|----------------------|---------------------------|----------------------------|
| 09/493,942 | January 28, 2000 | Pending |
| (which claimed the b | enefit of provisional app | lications as follows: |
| 60/117,609 | January 28, 1999 | |
| 60/136,654 | May 27, 1999) | |
| 09/483,551 | January 14, 2000 | Pending |
| | | |
| | enefit of provisional app | lications as follows: |
| | | lications as follows: |
| (which claimed the b | enefit of provisional app | lications as follows: |

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATIONS

Docket No. 36598/RJP/B600

| Application Number 09/439,101 | November 12, 1999 | Patented/Pending/Abandoned Pending |
|-------------------------------|------------------------------|------------------------------------|
| • | enefit of provisional applic | cations as ionows: |
| 60/108,459 | November 12, 1998 | |
| 60/108,209 | November 12, 1998 | |
| 60/108,210 | November 12, 1998 | |
| 60/117,609 | January 28, 1999 | |
| 60/136,115 | May 26, 1999 | |
| 60/136/116 | May 26, 1999 | |
| 60/136,654 | May 27, 1999 | |
| 60/159,726 | October 15, 1999) | |

POWER OF ATTORNEY: I hereby appoint the following attorneys and agents of the law firm CHRISTIE, PARKER & HALE, LLP to prosecute this application and any international application under the Patent Cooperation Treaty based on it and to transact all business in the U.S. Patent and Trademark Office connected with either of them in accordance with instructions from the assignee of the entire interest in this application; or from the first or sole inventor named below in the event the application is not assigned; or from __ in the event the power granted herein is for an application filed on behalf of a foreign attorney or agent.

| R. W. Johnston | (17,968) | Gregory S. Lampert | (35,581) | Raymond R. Tabandeh | (43,945) |
|------------------------|-----------|------------------------|----------|-------------------------|------------|
| | • • | Grant T. Langton | (39,739) | Phuong-Quan Hoang | (41,839) |
| D. Bruce Prout | (20,958) | • | | 2 • | |
| Hayden A. Carney | (22,653) | Constantine Marantidis | (39,759) | Cynthia A. Bonner | (44,548) |
| Richard J. Ward, Jr. | (24,187) | Marilyn R. Khorsandi | (45,744) | Jun-Young E. Jeon | (43,693) |
| Russell R. Palmer, Jr. | (22,994) | Daniel R. Kimbell | (34,849) | Marc A. Karish | (44,816) |
| LeRoy T. Rahn | (20,356) | Craig A. Gelfound | (41,032) | John F. O'Rourke | (38,985) |
| Richard D. Seibel | (22, 134) | Syed A. Hasan | (41,057) | Richard J. Paciulan | (28,248) |
| Walter G. Maxwell | (25,355) | Kathleen M. Olster | (42,052) | Josephine E. Chang | (46,083) |
| William P. Christie | (29,371) | Daniel M. Cavanagh | (41,661) | Frank L. Cire | (42,419) |
| David A. Dillard | (30,831) | Molly A. Holman | (40,022) | Harold E. Wurst | (22,183) |
| Thomas J. Daly | (32,213) | Lucinda G. Auciello | (42,270) | Robert A. Green | (28,301) |
| Vincent G. Gioia | (19,959) | Norman E. Carte | (30,455) | Derrick W. Reed | (40,138) |
| Edward R. Schwartz | (31, 135) | Joel A. Kauth | (41,886) | Stephen D. Burbach | (40,285) |
| John D. Carpenter | (34, 133) | Patrick Y. Ikehara | (42,681) | David B. Sandelands, Jr | . (46,023) |
| David A. Plumley | (37,208) | Mark Garscia | (31,953) | Heidi L. Eisenhut | (P-46,812) |
| Wesley W. Monroe | (39,778) | Gary J. Nelson | (44,257) | | • |

The authority under this Power of Attorney of each person named above shall automatically terminate and be revoked upon such person ceasing to be a member or associate of or of counsel to that law firm.

DIRECT TELEPHONE CALLS TO: Richard J. Paciulan, 626/795-9900 SEND CORRESPONDENCE TO: CHRISTIE, PARKER & HALE, LLP

P.O. Box 7068, Pasadena, CA 91109-7068

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| Full name of sole or first joint inventor Arya R. Behzad | Inventor's signature | 8/10/00 |
|---|----------------------|-------------|
| Residence and Post Office Address | | Citizenship |
| Danville, California | | U.S.A. |
| LLW PAS242800.1-*-7/10/00 4:54 PM | | |

COPY

COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Arya R. Behzad

Appl. No. 09/547,968

Filed: April 12, 2000

For:

Large Gain Range, High Linearity,

Low Noise MOS VGA

Art Unit: 2815

Examiner: Wojciechowicz, E.

Atty. Docket: 1875.1380008

Revocation of Prior Power of Attorney and Appointment of New Attorneys of Record

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

The undersigned, having express authority to represent Broadcom Corporation, the assignee of the entire right, title, and interest in the above-captioned application, by assignment filed at the U.S. Patent and Trademark Office on August 16, 2000 (copy enclosed), hereby revokes all powers of attorney heretofore given in the above-captioned application and appoints as his attorneys James D. Bennett, Registration No. 37,550 and David J. Rosmann, Registration. No. 43,059, and the attorneys associated with Customer Number 28393, those attorneys currently being: Robert Greene Sterne, Registration No. 28,912; Edward J. Kessler, Registration No. 25,688; Jorge A. Goldstein, Registration No. 29,021; Samuel L. Fox, Registration No. 30,353; David K.S. Cornwell, Registration No. 31,944; Robert W. Esmond, Registration No. 32,893; Tracy-Gene G. Durkin, Registration No. 32,831; Michele A. Cimbala, Registration No. 33,851; Michael B. Ray, Registration No. 33,997; Robert E. Sokohl, Registration No. 36,013; Eric K. Steffe, Registration No. 36,688; Michael Q. Lee, Registration No. 35,239; Steven R. Ludwig, Registration No. 36,203; John M. Covert, Registration No. 38,759; and Linda E. Alcorn, Registration No. 39,588, with full power of substitution, association, and revocation, to prosecute said application and to transact all business in the United States Patent and Trademark Office connected therewith.

The undersigned hereby grants said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

Send all correspondence to:

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 New York Avenue, N.W. Suite 600 Washington, D.C. 20005-3934.

Direct telephone calls to (202) 371-2600.

On behalf of Broadcom Corporation:

| | FOR: | Broadcom Corporation |
|------|------------|--|
| | SIGNATURE: | Mikull |
| COPY | | |
| | TITLE: | Vice President Chief Financial Office, |
| | DATE: | 7-17-01 |

P:\USERS\SWILLIAM\JTH Folder (New)\1875.1380008\revoke-new-poa

COPY

Certificate Under 37 C.F.R. § 3.73(b)

| Applicant. | Al ya N, Delizau | | |
|--------------------------|---|---|--|
| Application No | Io.: <u>09/547,968</u> | Filed:_ | April 12, 2000 |
| Entitled: | Large Gain Range, High Linearity, L | ow Noise MOS | SVGA |
| Broad | dcom Corporation , a | Corporal | tion , corporation, partnership, university, government agency,etc.) |
| states that it is: | | | |
| 1. [X] the as | ssignee of the entire right, title, and intere | st, or | |
| 2. [] an ass | signee of an undivided part interest | | |
| in the patent ap | application/patent identified above by virtu | ie of either: | |
| A. [X] An Arecord attach | rded in the Patent and Trademark Office a | ent application t Reel <u>011015</u> , | patent identified above. The assignment was Frame 0875, or for which a copy thereof is |
| | ain of title from the inventor(s) of the pate mee as shown below: | ent application/ | patent identified above to the current |
| 1. Fro | om: To: The document was recorded in the Pa Reel, Frame | tent and Trader | nark Office at |
| 2. Fro | om: To: The document was recorded in the Pa Reel, Frame | tent and Trader | |
| 3.Fro | om: To: To: The document was recorded in the Pa Reel, Frame | tent and Trader | nark Office at |
| [] A | additional documents in the chain of title a | are listed on a s | upplemental sheet. |
| [NO] docur | of assignments or other documents in the carrier A separate copy (i.e., the original assiment) must be submitted to Assignment Exament is to be recorded in the records of the seconds. | ignment docum Division in acco | ent or a true copy of the original rdance with 37 CFR Part 3, if the |
| The undersign | ned (whose title is supplied below) is empo | owered to act o | n behalf of the assignee. |
| Date: | 7-17-01 | · | |
| Name: Wi | illiam J Ruehle | | |
| Title: VIC | e President Chie | f Finan | cial Officer |
| Signature: | Montell | · · | |
| P:\USERS\SWILLIAM\ | AUTH Polder (NewWH875, 1380008\cert 3 |)\ | |

DO NOT FORWARD TO ASSIGNMENT BRANCH NOT FOR RECORDATION

Docket No. 36598/RJP/B600

Sole

ASSIGNMENT

WHEREAS, I, ARYA R. BEHZAD, residing at Danville, California, have invented certain new and useful improvements disclosed in an application for United States Letters Patent entitled LARGE GAIN RANGE, HIGH LINEARITY, LOW NOISE MOS VGA. filed April 12, 2000, Application No. 09/547,968.

AND WHEREAS, BROADCOM CORPORATION, a California corporation, having a place of business at 16215 Alton Parkway, Irvine, California 92618-3616 (hereafter, together with any successors, legal representatives or assigns thereof, called "ASSIGNEE") wants to acquire the entire right, title and interest in and to said improvements and application.

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over to ASSIGNEE the entire right, title and interest in and to said improvements, and said application and all divisions and continuations thereof, and all United States Letters Patents which may be granted thereon and all reissues, reexaminations and extensions thereof, and all priority rights under all available International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms in every participating country, and all applications for patents (including related rights such as utility-model registrations, inventor's certificates, and the like) heretofore or hereafter filed for said improvements in any foreign countries, and all patents (including all continuations, divisions, extensions, renewals, substitutes, and reissues thereof) granted for said improvements in any foreign countries; and I hereby authorize and request the United States Commissioner of Patents and Trademarks, and any officials of foreign countries whose duty it is to issue patents on applications as aforesaid, to issue all patents for said improvements to ASSIGNEE in accordance with the terms of this Assignment;

AND I HEREBY covenant that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith;

AND I HEREBY further covenant and agree that I will communicate to ASSIGNEE any facts known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute and reissue applications, make all rightful oaths and generally do everything possible to aid ASSIGNEE to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand this 10 day of אנאיבעל , 20 סס. Ayra R. Behzad

LLW PAS260962.1-*-7/10/00 5:03 PM

DO NOT FORWARD TO ASSIGNMENT BRANCH NOT FOR RECORDATION